

Work Order ID 163341

Tuesday, June 27, 2017 12:09:13 PM

163341

Page 1

Item ID: D3508-9 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Wearplate Fwd
 Start Date: 7/4/2017 Start Qty: 4.00 ***4*** Cust Item ID:
 Required Date: 7/12/2017 Req'd Qty: 4.00 ***4*** Customer:
 Reference:

Approvals: Process Plan: **DAS 21 9-88** Date: **JUL 03 2017** Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3508	Rev C								

100 0.00
100 FLOW WATER JET **DAS 19 9-88**
 Waterjet Memo 0.24 **(4) SC 17/07/04**
 FLOW CNC Waterjet 1-Cut as per Dwg D3508 Dwg Rev: **C** Prog Rev: **C** 2-
 Deburr if necessary

110 0.00
110 QC2- Inspect parts off machine FAI/FAIB **DAS 19 9-88**
 QC Memo 0.04 **(4) SC 17/07/04**
 Quality Control

120 0.00
120 QC8- Inspect parts - second check **DAS 38 9-88**
 QC Memo 0.08 **4 JUL 04 2017**
 Quality Control

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

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Page 2

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N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Wearplate Fwd

Start Date: 7/4/2017 Start Qty: 4.00

4

Cust Item ID:

Required Date: 7/12/2017 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

0.23

130

NC BRAKE

Brake NC

Memo

0.47

Brake NC

Debur and form on brake using DT8326 and DT8261 as per Dwg D3508

4

Ø

JUL 10 2017

DAS
19
9-00

140

QC5- Inspect part completeness to step on W/O

0.00

140

QC

Memo

0.08

Quality Control

4

DAS
38
9-00

JUL 10 2017

150

Grey Sandtex (Ref: 4.3.5.6) per QSI005 4.3

0.00

150

Powdercoat

Memo

0.17

Powder Coating

START TIME:

8:55

OVEN TEMPERATURE:

FINISH TIME:

9:05

4 Ø 17-07-13

DAS
34
9-00

DQA: _____ Date: _____



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Work Order update only ☐

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC3- Inspect Part Finish	0.00							
160									
QC	Memo	0.04				4			DAS 38 9-88
Quality Control									JUL 13 2017
170	Identify as per dwg & Stock Location: FP-002	0.00							
170									
Packaging	Memo	0.04				x4			12/10/17
Packaging	LOCATION : FP002								
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.40							17/7/17
Quality Control									



JUL 13 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Picklist Print

Tuesday, June 27, 2017 12:09:11 PM

Page 1

Work Order ID: 163341

163341

Parent Item: D3508-9

D3508-9

Parent Item Name: Wearplate Fwd

Start Date: 7/4/2017

Required Date: 7/12/2017

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A New Issue 07.06.12 EC
IPP Rev:B Rev C dwg 07-12-06 DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M304S20GA

Purchased

No

100

sf

114.2600

0.417

1.75579

M304S20GA

**

SC 17/07/04

304/316 .040 Sheet

Location

Loc Qty

Loc Code

MAT020

114.26

m136327

3.15

m136568

3.78

m137263

2.5

m137362

5.73

m137513

35.1

m137762

64

1.8

DQA: _____ Date: _____

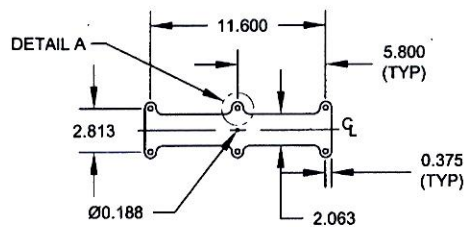


WORK ORDER NON-CONFORMANCE / UPDATE

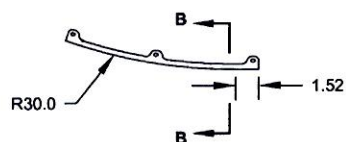
QA Closed: _____ Date: _____

Work Order update only ☐

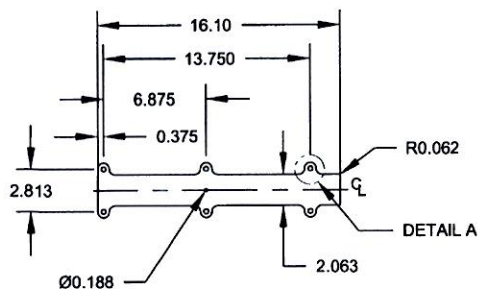
Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																



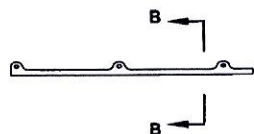
D3508-1 FLAT PATTERN



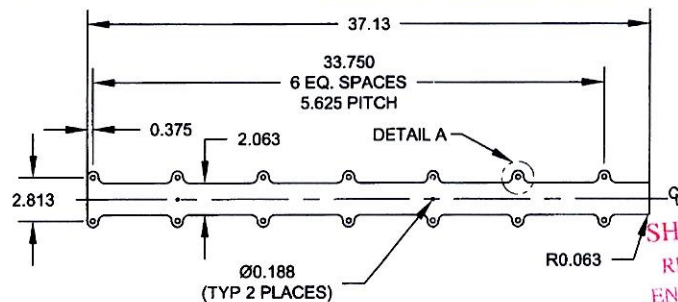
D3508-1 BENDING DETAIL
(MAKE FROM D3508-1F)



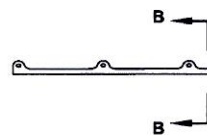
D3508-7F FLAT PATTERN



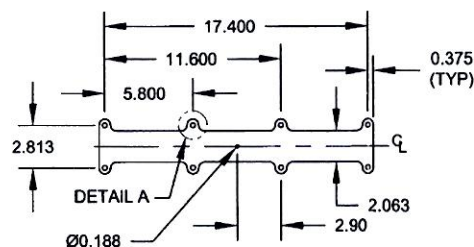
D3508-7F BENDING DETAIL
(MAKE FROM D3508-7F)



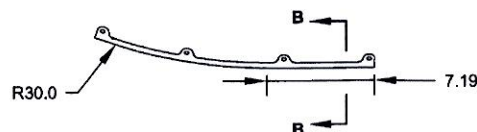
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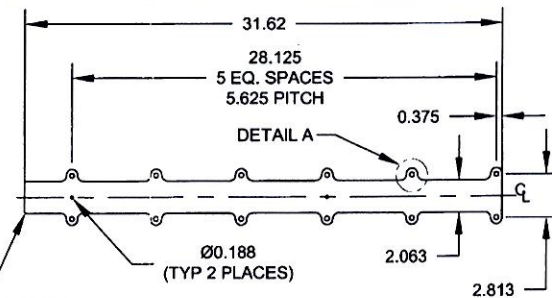
D3508-3 BENDING DETAIL
(MAKE FROM D3508-3F)



D3508-9F FLAT PATTERN



D3508-9F BENDING DETAIL
(MAKE FROM D3508-9F)



D3508-5 FLAT PATTERN



D3508-5 BENDING DETAIL
(MAKE FROM D3508-5F)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 163341
M.S.
170803

NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 20 GAUGE (0.038 THICK)
(REF. DART MATERIAL SPEC M304S20GA)
- 2) FINISH: POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 3) WELD PER DART QSI 004
- 4) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) BREAK SHARP EDGES: 0.005 TO 0.015
- 7) IDENTIFICATION: NONE
- 8) WEIGHT: D3508-1 - 0.47 lbs, D3508-3 - 0.95 lbs, D3508-5 - 0.77 lbs,
D3508-7 - 0.39 lbs, D3508-9 - 0.45 lbs, D3508-11 - 0.64 lbs
D3508-13 - 0.25 lbs

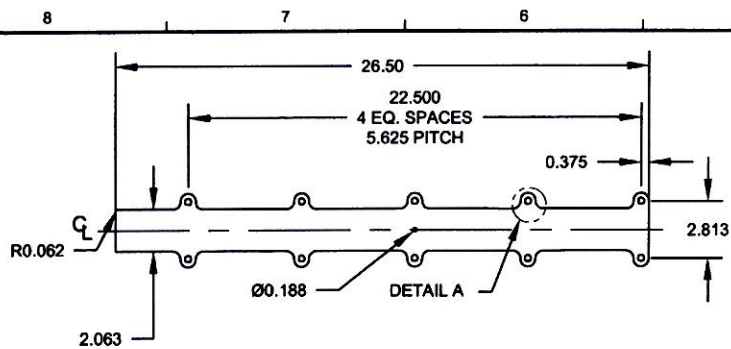
RELEASED
07.11.16

C	ADD -9/-11/-13 MOVE TAB OUTBOARD (2.813 WAS 2.733) CHANGE DRAWING FORMAT	PH	07.04.20
B	CHANGE STAINLESS STEEL, WIDEN	PH	06.10.27
A	NEW ISSUE	PH	06.04.21
REV.	DESCRIPTION	BY	DATE
DESIGN	24		
DRAWN	24		
CHECKED	11		
MFG. APPR.	11		
APPROVED	11		
DE APPR.	11		
DATE	07.04.20		

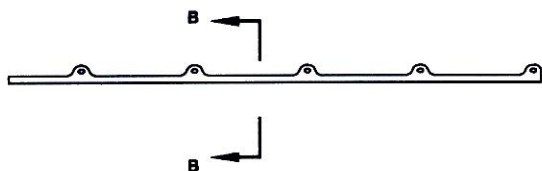
DART AEROSPACE USA, INC
PORT HADLOCK, WA

DRAWING NO. D3508
TITLE WEARPLATE
SCALE 1:8
REV. C
SHEET 1 OF 2

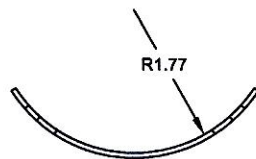
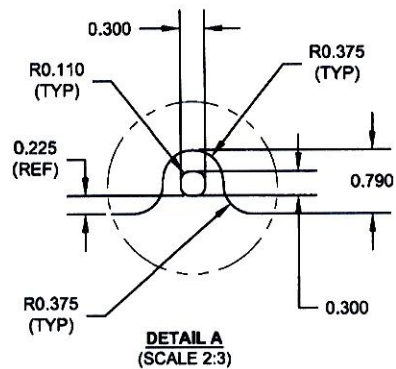
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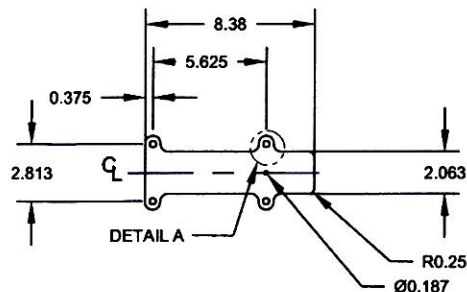
D3508-11F FLAT PATTERN



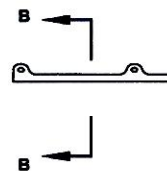
D3508-11 BENDING DETAIL
(MAKE FROM D3508-11F)



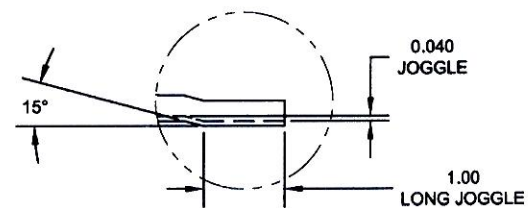
SECTION B-B
(SCALE 2:3)



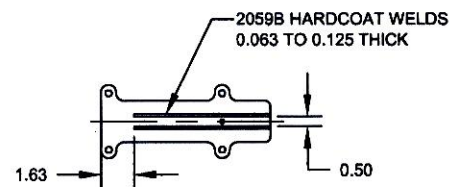
D3508-13F FLAT PATTERN



D3508-13 BENDING DETAIL
(MAKE FROM D3508-13F)



DETAIL C
(SCALE 1:2)



D3508-13 WELDING DETAIL

RELEASED
07.11.16

DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	PH	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3508	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		WEARPLATE	1:8
DATE	07.04.20	COPYRIGHT © 2007 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	